



ecology and environment, inc.

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International Specialists in the Environmental Sciences

TO: Fred N. Rubel, Chief ⁽⁴⁾
Emergency Response & Inspection Branch

DATE: October 24, 1979

FROM: John R. Burger *John R. Burger*
Technical Assistance Team

SUBJECT: Violation of Section 311 (b)(3), Clean Water Act of 1977; Diamondhead Refining Co., Inc., Kearny, N.J. - Case No.

(1) SYNOPSIS

Between 1400 and 1620 hours 1 Oct 79, a dye study was performed at the above subject facility to determine if a direct hydrological connection existed between the facility and the nearby surface waters of an unnamed tributary of Frank Creek, a tributary of the Passaic River. During the course of this study, both free-floating oil and an oily sheen were observed in stormwater runoff flowing off the Diamondhead Refining Co., Inc., property. This runoff was established to flow via the Interstate Rt. 280/N.J. Rt. 508 (Harrison St.) Interchange drainage collection system into the subject surface waters. (A detailed discussion of the dye study, including site plans and observations, are presented in the attached report).

(2) SUSPECTED VIOLATOR

Diamondhead Refining Company, Incorporated, Harrison Street, Kearny, New Jersey.

(3) SUSPECTED VIOLATION

Section 311 (b)(3) of the Clean Water Act of 1977.

(4) PERSONS REFERRED TO IN THIS REPORT

Fred N. Rubel, Chief, Emergency Response and Inspection Branch, EPA Region II, Edison, New Jersey.

Michael V. Polito, Chemist, Emergency Response and Inspection Branch, EPA Region II, Edison, New Jersey.

John R. Burger, Technical Assistance Team, Ecology and Environment, Inc., 295 Pierson Avenue, Edison, New Jersey.

(5) FINDINGS OF FACT

a) At 1400 hours, October 1, 1979, I arrived at the Diamondhead Refining Co., Inc., facility at Mike Polito's request. The company property is located at the western edge of New Jersey Highway 508 (Harrison St.)



and Interstate 280 Interchange in Kearny, N.J. (On that date, heavy intermittent precipitation had been recorded throughout New Jersey, generating a high probability for runoff adequate to perform a dye study at the site.)

b) Rainfall in the area was sufficient to cause stormwater runoff originating on the Company's property to flow off the property onto state-owned lands adjacent to the northern and northeastern property lines. This runoff was observed to contain both free-floating oil and an oily sheen.

c) Oil contaminated runoff flowed over the concrete curbing at various locations on the south side of Harrison Street and the south-bound ramp of the Rt. 280 Interchange (this interchange is presently under construction). These flows entered catch basins #1 and #5 directly (see attached dye study report).

d) Oil-contaminated runoff was also observed to flow into a depression on state property. (It was this depression that was the subject of the dye study.)

e) Poned runoff accumulated in the northeast corner of the Company's property could be observed from the adjacent state-owned land. This ponded runoff was contaminated with free-floating, opaque amber oil and could be seen to flow over a sandbag spillway and concrete slab, with most of the flow entering the subject depression via an open ditch. Lesser flows were also observed to originate in this northeast corner, moving either east or west along Harrison St. and parallel to the perimeter curbing.

f) The dye study confirmed a connection between the subject depression, catch basins 1, 2, 3, 4, and 5, and an unnamed tributary of Frank Creek. At catch basin #4, the surcharge from catch basins 1, 2, 3, and 5 caused an overflow of runoff out the inlet grating. The outfall produced a visible sheen on the receiving water. The discharge also contained oil-soaked solids that were carried into the marsh area drainage system.

g) A layer of grey, frothy, oily material was observed floating on the water flooding catch basins 1 and 5. Liquid levels in catch basins 2 and 3 were within 6" of the grating, and contained an amber, oily liquid identical in appearance to the free-floating product observed in (e) above.

h) A complete report of the dye study and field observations was prepared and forwarded through Fred N. Rubel, Chief, Emergency Response and Inspection Branch, to Michael V. Polito, Chemist, Emergency Response and Inspection Branch, S & A Division, Region II, Edison, N.J., on October 4, 1979.

(6) CONCLUSION

A violation of Section 311 (b)(3) of the Clean Water Act of 1977 occurred at the Diamondhead Refining Co., Inc., site in Kearny, New Jersey on

October 1, 1979, when free-floating oil and an oily sheen was observed in stormwater runoff flowing off company property and into catch basins discharging into an unnamed tributary of Frank Creek, a tributary of the Passaic River.

Attachment: " Report of dye study for purpose of determining applicability of 40 CFR 112 (SPCC Regulations) to Diamondhead Refining Co., Inc., Kearny, New Jersey."